

Research Permits for Crater Lake National Park

<u>Research Title</u>	<u>Begin Date</u>	<u>Finish Date</u>
Whitebark Pine Restoration and Cone Collection at Crater Lake National Park	June 1, 2011	December 1, 2015
Whitebark Pine Monitoring Pilot Study	July 1, 2009	September 1, 2009
White Pine Blister Rust (<i>Cronartium ribicola</i>) Phenology and New Alternate Hosts (<i>Castilleja</i> and <i>Pedicularis</i>) in the Oregon Cascades: Implications for Whitebark Pine Ecosystem Management	June 1, 2009	December 1, 2009
Western Airborne Contaminants Assessment Project	June 1, 2005	December 1, 2006
Volcanic Hazards monitoring of Crater Lake	July 1, 2008	December 1, 2058
Vegetation Monitoring Protocol	May 1, 2013	September 1, 2040
Vegetation Map of Crater Lake National Park	July 1, 2012	December 1, 2013
Using LiDAR to Determine the Relationship between Fire History and Forest Structure at Crater Lake National Park	September 1, 2001	October 1, 2014
US Pacific Northwest Critical Loads Development Project: The Coast to Crest Study	July 1, 2007	July 1, 2007
Updating existing tree-ring chronologies for paleoclimatic research in the Pacific Northwest	August 1, 2009	October 1, 2011
Understanding the adaptive significance of Gloger's Rule	June 1, 2012	October 1, 2014
Tracking Clark's nutcracker movements using intrinsic markers.	September 1, 2009	December 1, 2011
Tracing the evolution of the magma chamber from ~30 ka to 7.7 ka at Mount Mazama, Crater Lake, Oregon	July 1, 2010	December 1, 2014
The role of western dwarf mistletoe in fire susceptibility and behavior in mature ponderosa pine stands	July 1, 2002	September 1, 2005
The impact of exceptionally strong decadal climate variability on recent fire, tree recruitment, and hydro-ecological dynamics within four Klamath Network park units	July 1, 2012	December 1, 2014
The Generation of Post-Caldera Rhyodacite in Crater Lake, Oregon	August 1, 2002	May 1, 2004
The Evolution of Reproductive Isolation in <i>Mimulus</i>	May 1, 2005	October 1, 2008

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The Effects of White Pine Blister Rust on Whitebark Pine in Crater Lake National Park.	July 1, 2001	October 1, 2002
The Aquatic and Riparian Effectiveness Monitoring Program	June 1, 2010	June 1, 2012
Territorial Interactions Between Species of Corvids	June 1, 2002	September 1, 2002
Taxonomy of bluegrasses of the genus Poa L. (Poaceae) in Crater Lake National Park	July 1, 2013	December 1, 2015
Survey of streams for aquatic mushrooms	August 1, 2008	December 1, 2020
Survey of protozoan species within the boundaries of Crater Lake National Park	August 1, 2009	August 1, 2014
Survey effort for Leona's little blue butterfly.	June 1, 2013	August 1, 2014
Survey and detection programs for invasive pest species in the State of Oregon	November 1, 2005	November 1, 2006
Survey and detection programs for invasive pest species in the State of Oregon	June 1, 2006	June 1, 2010
Survey and detection programs for invasive pest species in the State of Oregon	July 1, 2008	October 1, 2010
Sun Creek Bull Trout Movement Study	July 1, 2008	November 1, 2015
Summer 2006 Assessment of Wetlands in Crater Lake National Park	June 1, 2006	September 1, 2008
Spatial, Temporal and Depth Distribution of Snow Properties in the Crater Lake Snowpack	January 1, 2005	June 1, 2005
Soil Characterization for 2006 International Soil Science Society	June 1, 2004	December 1, 2004
Small Mammal Inventories in Klamath Network National Parks, Monuments, and Recreation Areas - Crater Lake National Park	July 1, 2002	October 1, 2002
A Holistic Approach to a Holarctic Group: Subgeneric Relationships Within the Genus <i>Andrena</i> Fabricius (Hymenoptera: Andrenidae) with a Revision of the Subgenus <i>Callandrena</i>	June 1, 2004	March 1, 2007
Remote Camera Survey for Red Foxes	August 1, 2012	December 1, 2013

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Protozoa of Crater Lake: Collection and Identification of Planktonic and Benthic (Moss-Associated) Species	July 1, 2004	August 1, 2010
Proposal for sampling within Crater Lake National Park, as part of the Environmental Monitoring and Assessment Program	June 1, 2001	September 1, 2001
Preserving the National Landscape: Time and Experience in the Crater Lake National Park	May 1, 2011	August 1, 2013
Predicting post-fire regeneration needs: spatial and temporal variation in natural regeneration in SW Oregon and N California.	May 1, 2006	September 1, 2007
Pilot data collection for an American pika monitoring protocol in Crater Lake National Park	June 1, 2010	December 1, 2012
Patterns and consequences of insect herbivory in <i>Lupinus lepidus</i> at Crater Lake National Park	April 1, 2004	December 1, 2008
Owl populations in relation to Lidar data	June 1, 2013	August 1, 2013
Oregon Tech Field Entomology Course BIO 207	August 1, 2012	August 1, 2012
Oregon Department of Fish and Wildlife's Aquatic Inventories Project	September 1, 2012	December 1, 2013
Night Sky Monitoring	September 1, 2007	December 1, 2015
Mycorrhizas of Oregon white oak in high-elevation disjunct populations	July 1, 2008	October 1, 2009
Moonwort Fern (<i>Botrychium</i>) Isozyme Analysis	August 1, 2002	December 1, 2002
Monitoring White Pine (<i>Pinus albicaulis</i> , <i>P. balfouriana</i> , <i>P. flexilis</i>) Community Dynamics in the Pacific West Region - Klamath, Sierra Nevada, and Upper Columbia Basin Networks	June 1, 2012	September 1, 2020
Monitoring Vegetation Composition and Structure In the Parks of the	August 1, 2008	September 1, 2008
Monitoring changes in the Geographic Distribution of <i>Bombus occidentalis</i> Greene in Western North America: Effects on Diversity, Abundance, and Genetic Structure of Populations	June 1, 2009	June 1, 2010
Measure Acoustical Baseline at Crater Lake National Park in Advance of Air Tour Management Planning	June 1, 2010	September 1, 2011

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Landscape Scale Analysis of Fire Ecology in West Side Subalpine Forests at Crater Lake National Park	July 1, 2008	September 1, 2011
Klamath Network: a Pilot Study at Crater Lake		
Klamath Network Landbird Monitoring	July 1, 2008	December 1, 2058
Johnson and Thicket Hairstreak Crater Lake Survey	June 1, 2011	July 1, 2011
Inventory of Rare and Non-native Plants in the Klamath Network Parks-Crater Lake National Park	August 1, 2003	September 1, 2003
Inventory of Amphibians and Reptiles Klamath Parks Network Inventory and Monitoring Program	June 1, 2002	December 1, 2003
Inventory and distribution of dragonfly and damselfly species in Crater Lake National Park.	September 1, 2006	October 1, 2008
Invasive Species Early Detection Monitoring for Klamath Network Parks.	May 1, 2009	September 1, 2020
Integrated Aquatic Community and Water Quality Monitoring of Wadeable Streams in Crater Lake National Park by the Klamath I&M Network.	July 1, 2012	December 1, 2021
Inferring accurate ages of important and widespread, Holocene volcanic units in the Pacific Northwest		
Implementation of Large Scale Methods for Monitoring Landbird Demographics, Habitat Relations, and the Effects of Fuels Treatments on Birds and Bird communities.	June 1, 2005	December 1, 2005
Implementation of Large Scale Methods for Monitoring Landbird Demographics and Habitat Relations	January 1, 2002	December 1, 2002
High-precision wiggle-match dating:	June 1, 2004	December 1, 2004
Geologic Investigation of Phantom Ship	August 1, 2008	August 1, 2009
Geographic diversity in chloroplast haplotypes in the California red fir noble fir species complex	August 1, 2008	August 1, 2009
Forestry inventory and Analysis	May 1, 2002	September 1, 2002
Forest Inventory and Analysis	August 1, 2009	August 1, 2061
Forest Inventory and Analysis	February 1, 2012	December 1, 2013

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Forest Dynamics Across the Klamath Region: pattern, pace and mechanisms of change	July 1, 2011	December 1, 2012
First-ever Documentation of Sugar Pine as a Nutcracker Foodsource	September 1, 2008	October 1, 2009
Fire History of Whitebark Pine Forests	May 1, 2003	May 1, 2005
Field Validation of Burn Severity in the Bybee WFU	June 1, 2007	December 1, 2008
Field constraints on the deformation and breakup of injected magma	September 1, 2011	September 1, 2012
Feasibility study for real-time sub-foot GPS deployment	April 1, 2007	December 1, 2009
Factors Affecting the Distribution and Abundance of Alpine Populations of Botrychium pumicola in the Cascade Range of Central Oregon.	June 1, 2009	September 1, 2010
Extent of Endocrine Disruption in Fish of Western and Alaskan National Parks	August 1, 2008	December 1, 2009
Exploring seismicity at Crater Lake National Park	July 1, 2008	October 1, 2010
Exploring how park visitors overcome videophilia.		
Examining the Movements of Black Bears Within and Around Crater Lake National Park.	June 1, 2011	October 1, 2014
Ex situ conservation of rare Boechera in Crater Lake National Park	June 1, 2012	December 1, 2022
Evolution of High Latitude Birds	May 1, 2009	August 1, 2010
Evolution of color patterns in garter snakes	July 1, 2005	July 1, 2007
Estimating the Abundance of Black Bears (Ursus americanus) at Crater Lake National Park.	June 1, 2009	December 1, 2012
Endophytes to reduce blister rust severity in whitebark pine	June 1, 2008	September 1, 2018
Effects of Prescribed Burning on Mycorrhizal Fungi in Crater Lake National Park	July 1, 2003	July 1, 2007
Ecology of the Pumice Desert	July 1, 2010	September 1, 2015
Ecological Study of American Dippers and Characterization of Dipper Habitat Within Crater Lake National Park	June 1, 2012	November 1, 2012

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Do anthropogenic sounds affect calling patterns of Pacific Tree Frogs at Crater Lake National Park?	June 1, 2011	December 1, 2013
Distribution and relative abundance of bat species in Crater Lake National Park, Redwood National and State Parks, and Oregon Caves National Monument	August 1, 2004	December 1, 2005
Distribution and flora inventory of sphagnum bogs in Crater Lake National Park.	June 1, 2001	October 1, 2001
Discovering clues to impending explosive volcanic eruptions: magma chamber evolution at Mt. Mazama (Crater Lake), Oregon	July 1, 2010	December 1, 2013
Development of a New Volcanology Laboratory Curriculum at Colgate University: A Case Study of the Mount Mazama Eruption	September 1, 2006	May 1, 2007
Determination of benthic macroinvertebrate composition, biomass, and potential production in Crater Lake (Oregon, USA)	July 1, 2008	June 1, 2009
Demography of Northern Spotted Owls on Crater Lake National Park	May 1, 2007	August 1, 2009
Demography and Disturbance History across the Ponderosa Pine-Lodgepole Pine Ecotone in the Southern Cascade Range	September 1, 2008	December 1, 2011
Deep Ocean Flux Profiler Evaluation Project	July 1, 2009	July 1, 2010
Crater Lake, Mount Rainier, and North Cascades National Parks		
Crater Lake Rockcress Investigation	July 1, 2009	August 1, 2010
Crater Lake NP Winter Wolverine Survey	February 1, 2004	June 1, 2005
Crater Lake National Park: Who Goes There?	June 1, 2009	September 1, 2009
Crater Lake Lepidopteran Pre-blitz	July 1, 2012	July 1, 2012
Crater Lake BioBlitz: Sphagnum Bog	July 1, 2007	August 1, 2007
Conduit processes of the Cleetwood eruption, inferred from textural, petrologic, and water content analyses	September 1, 2001	August 1, 2002

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Comparative ecological genetics of adaptation in the high-elevation endemic monkeyflower, <i>Mimulus tilingii</i>	July 1, 2006	December 1, 2009
Coarse Wood Dynamics and Fuel Succession Following High Mortality Fire in Eastern Slope Cascade Mixed-Conifer Forests of Oregon	June 1, 2008	September 1, 2009
Characterization of fine particles (1-250 um) from 0-300 m in Crater Lake National Park, OR	June 1, 2009	August 1, 2009
Celebrating Amphibian Diversity at Crater Lake National Park	July 1, 2010	July 1, 2011
Calibration of the (U-Th)/He geochronometer by analysis of the Mt. Mazama ash flow tuff and granodiorite xenoliths	July 1, 2000	January 1, 2003
Burning and Beetles	June 1, 2006	September 1, 2007
Bryophyte Survey and Inventory in the Crater Lake Caldera	August 1, 2004	October 1, 2008
Bio-Optics of Crater Lake	July 1, 2007	December 1, 2012
Biogeography, Population Genetics and Conservation in a Group of "Living Fossils": the Evolutionary Fate of the Petaltail Dragonflies (Odonata: Petaluridae)	May 1, 2010	December 1, 2014
BioBlitz 2008: Lichens at Crater Lake National Park	August 1, 2008	August 1, 2008
Assessment of Sensitive Amphibians in Southwest Oregon (State - Federal Partnership)	June 1, 2001	December 1, 2002
Assessing the Morphology of the Earth's Magnetic Field During Transitional Paleomagnetic Events	August 1, 2008	June 1, 2009
Asian Aerosol Source Identification, Chemical Transformation, and Long Range Transport, Spring and Summer 2001.	March 1, 2001	April 1, 2001
Annie Creek Seepage Study, September 2008, Crater Lake National Park	September 1, 2008	September 1, 2008
An environmental study of 2-Methylhopanoids in alkaline lakes	May 1, 2011	November 1, 2012
Absolute and relative gravimeter measurements to support state-wide geoid definition and Cascadian tectonics research	August 1, 2007	September 1, 2007
A Search for Missing Plants at Crater Lake National Park	July 1, 2001	August 1, 2001

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A Phylogeographic and Taxonomic Study of <i>Oxypolis occidentalis</i> (Apiaceae)	August 1, 2007	September 1, 2008
A Phylogenetic Study of the Genus <i>Desmocerus</i> (Coleoptera: Cerambycidae)	November 1, 2012	December 1, 2014
A Model System Revisited: Phylogenetic Relationships and Species Limits Among Diploid Taxa of <i>Boechera</i> (Brassicaceae)	July 1, 2009	December 1, 2011
2008 Crater Lake NP Rangeland Wetland Ecological Site Description Data Collection	August 1, 2008	December 1, 2010
2005 Crater Lake NP Rangeland Ecological Site Description Data Collection	June 1, 2005	July 1, 2005